



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/684,026	10/06/2000	Anthony Louis Deviso	11076-002001	3193

23448 7590 10/14/2003

INTELLECTUAL PROPERTY / TECHNOLOGY LAW  
PO BOX 14329  
RESEARCH TRIANGLE PARK, NC 27709

EXAMINER

WINKLER, ULRIKE

ART UNIT	PAPER NUMBER
----------	--------------

1648

DATE MAILED: 10/14/2003

26

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/684,026

Applicant(s)

DEVICO ET AL.

Examiner

Ulrike Winkler

Art Unit

1648

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 15 September 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY [check either a) or b)]**

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b) ☐ they raise the issue of new matter (see Note below);
  - (c) ☒ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: see attached sheet.

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☐ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: \_\_\_\_\_.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

8. ☒ The proposed drawing correction filed on September 15, 2003 is a) ☒ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.
10. ☐ Other: \_\_\_\_\_

Art Unit: 1648

Applicant's amendments will not be entered because they do not materially reduce or simplify the issues.

Applicant's proposed amendment to the claims "wherein the intramolecular complex exhibits reactivity relative to an uncrosslinked complex comprising a soluble virus coat polypeptide sequence and a viral receptor polypeptide sequences". The addition does not add clarity because it appears applicant would like to indicate that the complex has greater reactivity compared to the individual parts, however, this is not clear in the proposed amendment. It is also not clear where in the instant specification there is written description for the term "uncrosslinked" or "crosslinked".

Applicant's arguments filed September 15, 2003 have been fully considered but they are not persuasive and the rejection is maintained for reason of record. It remains the Offices position that substituting one type of spacer for another type of spacer is obvious absent a showing that the spacers achieve a complex formation that is not equivalent. In the prior art the spacer is a chemical moiety while the spacer of the instant invention is an amino acid sequence. It is the conformational changes in the interaction of gp120 and CD4 that expose the "cryptic" epitopes.

Applicants assert that the office may not look to the specification of the DeVico '723 or '454 when making the double patenting rejection. The specification can always be used as a dictionary to learn the meaning of a term in the patent claim. *In re Boylan*, 392 F.2d 1017, 157 USPQ 370 (CCPA 1968). Further, those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a

Art Unit: 1648

claim in the application defines an obvious variation of an invention claimed in the patent. *In re Vogel*, 422 F.2d 438, 441-42, 164 USPQ 619, 622 (CCPA 1970). In making the instant double patenting rejection the Examiner first went to the specification of the DeVico '723 or '454 to determine if the term "covalently bonded" had a special meaning. Because the specification in DeVico '723 or '454 did not define covalently bonded as having a special meaning, the term was given its plain meaning in the art; which is a chemical bond, formed between atoms by the sharing of electrons. To establish the plain meaning in the art the Examiner cited Webster's dictionary, the use of dictionaries is available in determining the meaning to any disputed term [Texas Digital Systems Inc. v. Telegenix Inc; 64 USPQ2d 1812 (CA FC 2002)]. Therefore, it is not clear how the Examiner has improperly used the specification of DeVico '723 or '454 in making the prior rejections.

The term "intramolecular interacting complex" is not defined in the specification; the ordinary meaning of the term intramolecular interaction is the interaction a polypeptide chain experiences from the molecules in the chain. The interactions are the various non-covalent influences to which a polypeptide is subjected; they include electrostatic interactions, intramolecular hydrogen bonding and hydrophobic forces. The intramolecular hydrogen bonds establish the native folding pattern of a protein. Therefore, any polypeptide in solution will have intramolecular interactions. Applicant's arguments are drawn the interaction between CD4 and gp120, when the molecules are found in solution together will form intermolecular bonds. However, upon covalently bonding the two molecules any bonding and attractions they may have will then be termed intramolecular because once covalently bonded the complex as claimed in the DeVico '723 or '454 becomes a single molecule.

Art Unit: 1648

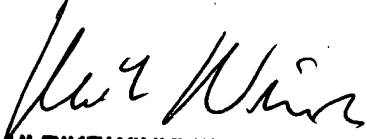
Applicants are arguing that the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Most importantly applicants are arguing that the Chackerian et al. is not an anticipatory reference. The reference was cited for the mere showing that making chimeras between a virus receptor and a virus coat has been done in the prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ulrike Winkler, Ph.D. whose telephone number is 703-308-8294. The examiner can normally be reached M-F, 8:30 am - 5 pm. The examiner can also be reached via email [ulrike.winkler@uspto.gov].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Housel, can be reached at 703-308-4027.

The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4242 or for informal communications use 703-746-3162.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

  
ULRIKE WINKLER, PH.D.  
PATENT EXAMINER 10/10/03